Serial No. 10/705,823 June 16, 2005 Reply to the Office Action dated March 21, 2005 Page 6 of 9

REMARKS/ARGUMENTS

Claims 1-20 are pending in this application.

Claims 1, 2, and 5 were rejected under 35 U.S.C. §102(b) as being clearly anticipated by Morimoto (JP 08-241900). Claims 11, 12, and 15 were rejected under 35 U.S.C. §102(b) as being clearly anticipated by Morimoto. Claims 1, 2, 5, and 5 were rejected under 35 U.S.C. §102(b) as being clearly anticipated by Wille et al. (U.S. 5,821,456). Claims 4, 6-10, 14, and 16-20 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Morimoto. Claims 3, 4, 6, and 8-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wille et al. Claims 11-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wille et al., and further in view of Morimoto.

Claim 1 recites:

"A method for fabricating a circuit module comprising the steps of:
supplying a resin from a dispenser needle onto a
substrate on which a chip component is mounted in a flip chip
configuration so as to form a resin pool between a sidewall of the
chip component and a sidewall of the dispenser needle; and
filling a gap between the chip component and the substrate
with the resin of the resin pool." (emphasis added)

Claim 11 recites features and method steps that are similar to the features and method steps recited in claim 1, including the above-emphasized method step.

With the unique features and method steps recited in Applicants' claims 1 and 11, including the step of "supplying a resin from a dispenser needle onto a substrate on which a chip component is mounted in a flip chip configuration so as to form a resin pool between a sidewall of the chip component and a sidewall of the dispenser needle," Applicants have been able to provide a method for fabricating a circuit module whereby the gap between a chip component and a substrate is filled with resin using simplified equipment such that the undesired spread of the resin on the substrate is prevented (see, for example, the third full paragraph on page 2 of the originally filed specification).

Serial No. 10/705,823 June 16, 2005 Reply to the Office Action dated March 21, 2005 Page 7 of 9

The Examiner alleged that each of Morimoto and Wille et al. teaches all of the features and method steps recited in Applicants' claim 1, and that Morimoto teaches all of the features and method steps recited in Applicants' claim 11. Applicants respectfully disagree.

Contrary to the Examiner's allegations, neither Morimoto nor Wille et al. teaches or suggests the step of "supplying a resin from a dispenser needle onto a substrate on which a chip component is mounted in a flip chip configuration so as to form a resin pool between a sidewall of the chip component and a sidewall of the dispenser needle" (emphasis added) as recited in Applicants' claim 1, and similarly in Applicants' claim 11.

As clearly seen in Figs. 1(b) and 2(b) of Morimoto, a sealing resin 6 is supplied from a container that is disposed <u>above and spaced from</u> the semiconductor 1. The resin container of Morimoto is not a dispenser needle and does not include a dispenser needle. Thus, Morimoto clearly fails to teach or suggest a dispenser needle as recited in Applicants' claim 1, and similarly in Applicants' claim 11.

In addition, even assuming arguendo that that the resin container of Morimoto could be fairly construed as a dispenser needle, since the resin container of Morimoto is disposed above and spaced from the semiconductor 1, Morimoto clearly fails to teach or suggest a resin pool that is formed between a sidewall of a chip component (semiconductor 1 of Morimoto) and a sidewall of the dispenser needle. As clearly seen in Figs. 1(b) and 2(b) of Morimoto, the resin exits the resin container from the bottom surface thereof, and does not come into contact with any sidewall of the resin container. Therefore, Morimoto certainly fails to teach or suggest the step of "supplying a resin from a dispenser needle onto a substrate on which a chip component is mounted in a flip chip configuration so as to form a resin pool between a sidewall of the chip component and a sidewall of the dispenser needle" (emphasis added) as recited in Applicants' claim 1, and similarly in Applicants' claim 11.

Serial No. 10/705,823 June 16, 2005 Reply to the Office Action dated March 21, 2005 Page 8 of 9

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1 and 11 under 35 U.S.C. § 102(b) as being clearly anticipated by Morimoto.

Wille et al. merely teaches that a precursor 26, which the Examiner alleged corresponds to the resin recited in Applicants' claim 1, "is dispensed proximate to die attach region adjacent to integrated circuit component 14 and is drawn into gap 20 by capillary action". Wille et al. fails to teach or suggest any specific location from which the resin is dispensed, and certainly fails to teach or suggest that the resin is supplied from a dispenser needle so as to form a resin pool between a sidewall of the integrated circuit component 14 and a sidewall of a dispenser needle. Thus, similar to Morimoto, Wille et al. clearly fails to teach or suggest the step of "supplying a resin from a dispenser needle onto a substrate on which a chip component is mounted in a flip chip configuration so as to form a resin pool between a sidewall of the chip component and a sidewall of the dispenser needle" (emphasis added) as recited in Applicants' claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. § 102(b) as being clearly anticipated by Wille et al.

Accordingly, Applicants respectfully submit that Morimoto and Wille et al., applied alone or in combination, fail to teach or suggest the unique combination of features and method steps recited in Applicants' claims 1 and 11.

In view of the foregoing remarks, Applicants respectfully submit that claims 1 and 11 are allowable. Claims 2-10 and 12-20 are dependent upon claims 1 and 11, and are therefore allowable for at least the reasons that claims 1 and 11 are allowable.

In view of the foregoing remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

Serial No. 10/705,823 June 16, 2005 Reply to the Office Action dated March 21, 2005 Page 9 of 9

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

Date: June 16, 2005

Attorneys for Applicant

Joseph R. Keating Registration No. 37,368

Christopher A. Bennett Registration No. 46,710

KEATING & BENNETT LLP 10400 Eaton Place, Suite 312

Fairfax, VA 22030

Telephone: (703) 385-5200 Facsimile: (703) 385-5080